

**City of Carmel**  
**When are smoke alarms required?**

**Definitions:**

**Living Space:** A space protected from the weather, used all year long and that has heating, insulation and all required electrical convenience receptacles and lights.

**Addition:** Adding living space to an existing home, which requires a foundation, roof and walls, heat, insulation and electrical receptacles and light(s). Windows may be required.  
**A Building Permit and Smoke Alarms are required.**

**Example:** Unfinished basement to living space;  
attic to living space;  
new addition of living space onto existing home;  
porch or patio to living space;  
conversion of any room to a bedroom;  
living space over a detached or attached garage.

**Remodel:** Any removal of wall coverings, change in structural or non-structural walls.  
Relocation of bathroom and/or kitchen plumbing fixtures. Adding new bathroom, kitchen, bedroom.  
Changing weight bearing capacity or any floor, roof or wall. Or, any other work for which a permit is required.  
Any structure damaged by fire, wind, lightning, storm or other accident.  
**Building permit and smoke alarms required.**

**Smoke Alarms MUST be installed in each bedroom and on each floor.**

Smoke alarms are to be powered from the home's electrical system and must be interconnected. Refer to City of Carmel Smoke Alarms 2005 document in this packet. (Indiana One and Two family Dwelling Code Section 313)

**Exception:** Where there is no access to the attic and/or basement because of finished ceilings or floors (crawl space not included). A battery operated system in accordance with the ~~Indiana One and Two Family Dwelling Code Section 313~~ can be used.

The following projects **DO NOT** require smoke alarms.

**Kitchen Remodel** Change of cabinets and counter top, sink bowl, faucet and disposal in existing locations. Replacement of wood or vinyl floor covering. No clay or ceramic floor covering. No walls added or removed, no island work station. All receptacles to be GFCI protected.  
**No plan review and no permit required.**

**Bath Remodel** Change of existing plumbing fixtures, floor covering and wall cabinet. No plumbing fixtures relocated. No walls moved. No window(s) added or removed. No receptacles or light fixtures added. No hydro massage bathtub. All receptacles must be GFCI protected.  
**No plan review and no permit required.**

**Enclosed Porch:** Also known as; Sun Room or 3 Season Room.  
A porch that has a roof. Walls are being installed or altered to hold screen and/or windows and doors, **AND**, is completed separated from the house by doors and/or walls and windows.  
Ceiling fan/light with switch permitted.  
No heating system or connection to existing heating system.  
No added electrical receptacles.  
**Plan Review and Building Permit required.**

**Other:** Detached garage. Attached garage. Porch. A deck that is more than 30 inches above the ground.  
Pool, spa or hot tub. Pool House.  
**Plan Review and Building Permit required.**

Replacement of windows. 30 inch or less deck, bathroom or kitchen remodel. Home Owners Statement Required.

## SMOKE ALARMS 2005

**Section R313; smoke alarms.** Each smoke alarm shall be listed:

**R313.2 Required smoke alarm locations.** At least one smoke alarm shall be installed in each of the following locations:

1. In the living area remote from the kitchen and cooking appliances. Smoke alarms located within 20 feet horizontally of a cooking appliance must incorporate a temporary silencing feature or be photoelectric type.
2. In each room designed for sleeping.
3. On the ceiling of the upper level near the top or above each stairway, other than a basement stairway, in any multistory dwelling. The alarm shall be located so that smoke rising in the stairway cannot be prevented from reaching the alarm by an intervening door or obstruction.
4. On the basement ceiling near the stairway.

**R313.2.1 Alterations and additions.** When interior alterations or additions requiring a permit occur, **OR** when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be provided with smoke alarms.

**The Alarms shall be located in the same places as required for new dwellings. The smoke alarms shall be interconnected and hard wired.**

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**R313.5.2 Interconnection.** When more than one smoke alarm is required to be installed within an individual dwelling unit, the alarm devices shall be **interconnected** in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

### **EXCEPTIONS:**

1. Smoke alarms in existing areas shall not be required to meet the requirements where the alterations do not result in the removal of the interior wall or ceiling finishes exposing the structure **unless**, there is an attic, crawlspace, or basement available that could provide access for hard wiring and interconnection without the removal of interior finishes.
2. Repairs are exempt from the requirements of this section.

**R313.3 Prohibited smoke alarm locations.** A smoke alarm required under this section shall not be placed:

1. Within 3 feet horizontally from any grille moving conditioned air within the living space or
2. In any location or environment that is prohibited by the terms of the listing.

**R313.4 Mounting requirements.** Smoke alarms according to their listing installation instructions and the requirements of this section.

**R313.4.1 Flat Ceilings.** In rooms with flat, peaked sloping or single slope ceilings with a slope of less than 1.5/12, smoke alarms shall be mounted either:

1. On the ceiling at least 4 inches from each wall; or
2. On a wall with the top of the alarm not less than 4 inches below the ceiling and not farther from the ceiling than 12 inches or the distance from the ceiling specified in the smoke alarm manufacture's listing and installation instructions, whichever is less.

**R313.4.2 Peaked Sloping Ceilings.** In rooms with peaked sloping ceilings with a slope of 1.5/12 or greater, smoke alarms shall be:

1. Mounted on the ceiling or wall within 3 feet measured horizontally, from the peak of the ceiling;
2. At least 4 inches measured vertically, below the peak of the ceiling; and
3. At least 4 inches from any projecting structural element.

**R313.4.3 Single Slope Ceilings.** In rooms with single slope ceilings with a slope of 1.5/12 or greater, smoke alarms shall be:

1. Mounted on the ceiling or wall within 3 feet measured horizontally, of the high point of the ceiling; and
2. Not closer than 4 inches from any adjoining wall surfaces or any projecting structural element.

**R313.4.4, 313.4.1, 313.3.2 Visible and tactile notification appliances.** SEE CODE.

**R313.5 Connection to Power Source.** Each smoke alarm shall be powered from:

1. The electrical system of the home as the primary power source and a battery as a secondary power source; or
2. A battery rated for a 10 year life, provided the smoke alarm is listed for use with a 10 year battery.

**R313.5.1 Circuitry.** Each smoke alarm whose primary power source is the home electrical system shall be mounted on an electrical outlet box and be connected by a permanent wiring method to a general branch circuit.